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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,205	12/08/2004	Niclas Rosberg	P08510US00/MP	5622

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EXAMINER	
TALBOT, MICHAEL	
ART UNIT	PAPER NUMBER
3722	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,205	ROSBERG, NICLAS	
	Examiner	Art Unit	
	Michael W. Talbot	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9,10 and 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,10 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the following informalities.

Refer to line 7, the phrase "conical surfaces which at axial displacement" should be changed so as to read --conical surfaces which an axial displacement--.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 84/04367. WO 84/04367 shows in Figures 1-3 a hydro-mechanical clamping device having one end capable of being mounted in a machining device and another end capable of releaseably holding a shaft (b) of a tool. WO 84/04367 shows the hydro-mechanical clamping device comprising an inner sleeve (containing surface e) with an axial bore for receiving the shaft of the tool (Fig. 1) and an outer sleeve (containing surface f) enclosing at least one chamber (c) in which a clamping means in the shape of an annular piston (d) is enclosed. WO 84/04367 shows the piston by means of hydraulically operating means is displaceable in an axial direction (page 5, lines 13-20), wherein the piston and the inner sleeve have interacting conical surfaces (page 5, lines 10-13) having a conicity that is self-locking (page 5, lines 24-26), wherein axial displacement of the piston in one direction causes radial displacement of the inner sleeve for clamping the shaft and axial displacement of the piston in another direction causes relief of the inner sleeve for releasing the shaft (page 5, lines 13-20). WO 84/04367 shows the chamber

including a pressurized chamber (to the left side of piston d within chamber c as viewed in Fig. 1) and a relief chamber (to the right side of piston d within chamber c as viewed in Fig. 1). WO 84/04367 shows the inner sleeve (containing surface e) and outer sleeve (containing surface f) being joined together by welding (Fig. 1 at j, Fig. 3 at m,n and col. 7, lines 3-25). WO 84/04367 shows a sealing means in the shape of O-rings arranged between the piston and the outer sleeve (col. 5, lines 20-24). WO 84/04367 shows a part intended for clamping a tool is integrated with a part intended for mounting in a machining device (Figs. 1 and 3).

4. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 84/04367. WO 84/04367 shows in Figures 1-3 a hydro-mechanical clamping device having one end capable of being mounted in a machining device and another end capable of releaseably holding a tool (a). WO 84/04367 shows the hydro-mechanical clamping device comprising an inner sleeve (containing surface e) and an outer sleeve (containing surface f) enclosing at least one chamber (c) in which a clamping means in the shape of an annular piston (d) is enclosed. WO 84/04367 shows the piston by means of hydraulically operating means is displaceable in an axial direction (page 5, lines 13-20), wherein the piston and the inner sleeve have interacting conical surfaces (page 5, lines 10-13) having a conicity that is self-locking (page 5, lines 24-26), wherein axial displacement of the piston in one direction causes radial expansion of the outer sleeve for clamping the tool and axial displacement of the piston in another direction causes relief of the outer sleeve for releasing the tool (page 5, lines 13-20). WO 84/04367 shows the chamber including a pressurized chamber (to the left side of piston d within chamber c as viewed in Fig. 1) and a relief chamber (to the right side of piston d within chamber c as viewed in Fig. 1).

5. Claims 1-3,5-7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Firestone et al. '759. Firestone et al. '759 shows in Figures 2 and 3 a hydro-mechanical

clamping device having one end (at 81) capable of being mounted in a machining device and another end capable of releaseably holding a shaft (75) of a tool. Firestone et al. '759 shows the hydro-mechanical clamping device comprising an inner sleeve (40,70) with an axial bore for receiving the shaft of the tool (Fig. 3) and an outer sleeve (10,11) enclosing at least one chamber (space above and below piston 14) in which a clamping means in the shape of an annular piston (14) is enclosed. Firestone et al. '759 shows the piston by means of hydraulically operating means (66,67) is displaceable in an axial direction (col. 2, lines 32-46), wherein the piston and the inner sleeve have interacting conical surfaces (16,59) having a conicity that is self-locking (via ball 60), wherein axial displacement of the piston in one direction causes radial displacement of the inner sleeve for clamping the shaft and axial displacement of the piston in another direction causes relief of the inner sleeve for releasing the shaft (col. 2, lines 32-46). Firestone et al. '759 shows the chamber including a pressurized chamber (space above piston 14 within chamber as viewed in Fig. 3) and a relief chamber (space below piston 14 within chamber as viewed in Fig. 3). Firestone et al. '759 shows a sealing means in the shape of O-rings (45) arranged between the piston and the outer sleeve and further arranged closer to the pressurization side of the piston than to the relief side. Firestone et al. '759 shows a part intended for clamping a tool is integrated with a part intended for mounting in a machining device (Figs. 1 and 3).

6. Claims 1-3,5-7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 3502362. DE 3502362 shows in the Figure a hydro-mechanical clamping device having one end (right side as viewed in Fig.) capable of being mounted in a machining device and another end capable of releaseably holding a shaft of a tool. DE 3502362 shows the hydro-mechanical clamping device comprising an inner sleeve (4,6,7,8) with an axial bore for receiving the shaft of the tool and an outer sleeve (1,2) enclosing at least one chamber (10,20) in which a clamping

means in the shape of an annular piston (3,5) is enclosed. DE 3502362 shows the piston by means of hydraulically operating means (17,18) is displaceable in an axial direction (Abstract), wherein the piston and the inner sleeve have interacting conical surfaces (tapered surface 5 and tapered surfaces 6,7) having a conicity that is self-locking (via ball 19 and Abstract), wherein axial displacement of the piston in one direction causes radial displacement of the inner sleeve for clamping the shaft and axial displacement of the piston in another direction causes relief of the inner sleeve for releasing the shaft (Abstract). DE 3502362shows the chamber including a pressurized chamber (10) and a relief chamber (20). DE 3502362 shows a sealing means in the shape of O-rings (13,14) arranged between the piston and the outer sleeve and further arranged closer to the pressurization side of the piston than to the relief side. DE 3502362 shows a part intended for clamping a tool is integrated with a part intended for mounting in a machining device (Figs. 1 and 3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Firestone et al. '759. Firestone et al. '759 discloses the claimed invention except for the type of connection joining the inner and outer sleeves. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to join the inner and outer sleeves through welding for the purpose of permanent securement because it has been held to be within the general skill of a worker in the art to select a known joining method on the basis of its suitability for the intended use as a matter of obvious design choice.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3502362. DE 3502362 discloses the claimed invention except for the type of connection joining the inner and outer sleeves. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to join the inner and outer sleeves through welding for the purpose of permanent securement because it has been held to be within the general skill of a worker in the art to select a known joining method on the basis of its suitability for the intended use as a matter of obvious design choice.

Response to Arguments

10. Applicant's arguments filed 28 December 2006 have been fully considered but they are not persuasive.

11. Examiner respectfully disagrees with Applicant's assertion that the 102 anticipatory prior art rejection recited above relies upon a non-analogous art. It has been held that arguments that the alleged anticipatory prior art is non-analogous or is not recognized as solving the problem solved by the claimed invention, are not germane to a rejection under section 102. The question of whether or not a reference is analogous is not relevant to whether that reference anticipates. A reference may be directed to an entirely different problem than the one addressed by the inventor, or may be directed to an entirely different field of endeavor than that of the claimed invention, yet the reference is still anticipatory if it explicitly or inherently discloses every limitation recited in the claims (MPEP 2131.05). In the case, WO 84/04367 shows a coupling with one end capable of being mounted in a machining device and another end capable of releaseably holding a shaft (Figs. 1 and 2).

12. In response to applicant's argument that the claimed invention "provides a strong tool mount with very good centering and balancing of the tool, while at the same time providing a strongly clamped tool", "provides for a tool to receive radial forces through the outer sleeve", "is

capable of receiving considerably larger forces than previously known devices", and "permits a clamped tool to work under a very high load without generating vibrations which may lead to grooves being formed in cut surfaces", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, which WO 84/04367 clearly is, then it meets the claim.

13. In response to applicant's argument that Firestone et al. '759 and DE 3502362 fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., locking is achieve without any axial movement of the inner sleeve, i.e. solely radial movement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims, as written, do not prohibit the presence of an axial moving component of the inner sleeve to initiate the radial compression of the inner sleeve to clamp the device.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWT
Examiner
5 March 2007

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER